## WHAT IS CLAIMED IS:

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1. A camera incorporating therein an aperture member which is variable in an aperture caliber including a completely closed condition and changes over to an aperture caliber after an alteration with a predetermined response speed in accordance with an alteration instruction of the aperture caliber, wherein a subject light incident through an aperture of the aperture member is received by an imaging device to create image data, the camera comprising:

a sensor that monitors the aperture caliber of the aperture member;

an aperture control section that controls the aperture caliber of the aperture member;

a photometry section that measures brightness of field in accordance with light quantity of received light by the imaging device, and

an exposure control section that controls an exposure in accordance with the brightness of field measured by the photometry section,

wherein the photometry section measures the brightness of field when the aperture member is of a predetermined first aperture caliber which is a relatively large aperture caliber, and measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber which is relatively smaller than the first

aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber, and

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wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber.

2. A camera according to claim 1, wherein the camera further comprises a photography timing control section that performs photography in a state that the aperture member is in the first aperture caliber and in a state that the aperture member is steadied to the second aperture caliber in accordance with whether a photometry of the brightness of field, wherein the aperture member is in the first aperture caliber, is possible or impossible, and

wherein the exposure control section controls a shutter speed.

3. A camera according to claim 1, wherein the camera further comprises a photography timing control section that performs photography in a state that the aperture member is in the first aperture caliber and

performs photography regardless of a state that the aperture member is steadied to the second aperture caliber in accordance with whether a photometry of the brightness of field, wherein the aperture member is in the first aperture caliber, is possible or impossible, and

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wherein the exposure control section controls a shutter speed, and in a case where a measurement of the brightness of field is impossible when the aperture member is in the first aperture caliber, the exposure control section controls the shutter speed in accordance with the brightness of field measured by the photometry section in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber, an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, and an aperture caliber in a photographic timing, of the aperture member, which is monitored by the sensor.

4. A camera incorporating therein an aperture member which is variable in an aperture caliber including a completely closed condition and changes over to an aperture caliber after an alteration with a predetermined response speed in accordance with an alteration instruction of the aperture caliber, wherein a subject light incident through an aperture of the aperture member is received by an imaging device to create image data, the camera comprising:

an aperture control section that controls the

aperture caliber of the aperture member;

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a photometry section that measures brightness of field in accordance with light quantity of received light by the imaging device, and

an exposure control section that controls an exposure in accordance with the brightness of field measured by the photometry section,

wherein the photometry section measures the brightness of field when the aperture member is of a predetermined first aperture caliber which is a relatively large aperture caliber, and measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber,

wherein the camera further comprises a photography timing control section that performs photography in a state that the aperture member is in the first aperture caliber and performs photography regardless of a state that the aperture member is steadied to the second aperture caliber in accordance with whether a photometry of the brightness of field, wherein the aperture member is in the first aperture caliber, is possible or impossible, and

wherein the exposure control section controls a shutter speed, and in a case where a measurement of the

brightness of field is impossible when the aperture member is in the first aperture caliber, the exposure control section controls the shutter speed regarding as the brightness of field measured by the photometry section in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber being measured when the aperture member is in the second aperture caliber, and an exposure is corrected on the created image data.

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